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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,894	03/30/2004	Ok-Kyung Cho	1021.43718X00	1336
20457 7590 04/07/2008 ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-3873				
EXAMINER WINAKUR, ERIC FRANK				
ART UNIT		PAPER NUMBER		
3768				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/811,894

**Applicant(s)**

CHO ET AL.

**Examiner**

Eric F. Winakur

**Art Unit**

3768

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SI/DE)  
Paper No(s)/Mail Date See Continuation Sheet
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :3/30/04; 5/3/04; 7/6/04; 12/16/04; 3/16/05; 4/13/05; 4/27/05; 6/8/05; 12/13/07.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 1 is objected to because of the following informalities: it appears that the term "concentration" (line 31) should read "temperature", as the element is described as a temperature detector. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 9 - 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 9 refers to "a storage portion where information about blood hemoglobin concentration and hemoglobin oxygen saturation is stored". However, contrary to the disclosure that details that this information is required when calculating the blood sugar level, this information is not used by the "calculating portion" as set forth in the claim. Thus, the relationship between the information and the calculation portion does not appear to be clearly set forth.

### ***Double Patenting***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory

obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1 - 8 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 15 of U.S. Patent No. 6,954,661. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the patent include all of the features of the instant

application except for operation buttons and control buttons and a button signal processing filter mechanism for processing an input signal from the operation buttons. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of the patent to include operation and control buttons and a signal processing filter mechanism, since it was well known in the art to include such buttons and elements to process inputs from the buttons in an apparatus to allow a user to input data required by the apparatus, control measurement timing, etc., and it has generally been held to be within the skill level of the art to modify an apparatus to include well known elements for their intended purpose.

6. Claims 1 - 12 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 12, and 15 of U.S. Patent No. 7,120,478. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the patent include all of the features of the instant application except for operation buttons and control buttons and a button signal processing filter mechanism for processing an input signal from the operation buttons. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of the patent to include operation and control buttons and a signal processing filter mechanism, since it was well known in the art to include such buttons and elements to process inputs from the buttons in an apparatus to allow a user to input data required by the apparatus, control measurement timing, etc., and it has generally been held to be within the skill level of the art to modify an apparatus to include well known elements for their intended purpose.

7. Claims 1 - 12 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 7, and 14 of U.S. Patent No. 7,254,428. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the patent include all of the features of the instant application except for operation buttons and control buttons and a button signal processing filter mechanism for processing an input signal from the operation buttons. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of the patent to include operation and control buttons and a signal processing filter mechanism, since it was well known in the art to include such buttons and elements to process inputs from the buttons in an apparatus to allow a user to input data required by the apparatus, control measurement timing, etc., and it has generally been held to be within the skill level of the art to modify an apparatus to include well known elements for their intended purpose.

8. Claims 1 - 12 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, and 9 of U.S. Patent No. 7,251,517. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the patent include all of the features of the instant application except for operation buttons and control buttons and a button signal processing filter mechanism for processing an input signal from the operation buttons. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of the patent to include operation and control buttons and a signal processing filter mechanism, since it was well known in the

art to include such buttons and elements to process inputs from the buttons in an apparatus to allow a user to input data required by the apparatus, control measurement timing, etc., and it has generally been held to be within the skill level of the art to modify an apparatus to include well known elements for their intended purpose.

9. Claims 1 - 12 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 8, and 12 of U.S. Patent No. 7,215,983. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the patent include all of the features of the instant application except for operation buttons and control buttons and a button signal processing filter mechanism for processing an input signal from the operation buttons. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of the patent to include operation and control buttons and a signal processing filter mechanism, since it was well known in the art to include such buttons and elements to process inputs from the buttons in an apparatus to allow a user to input data required by the apparatus, control measurement timing, etc., and it has generally been held to be within the skill level of the art to modify an apparatus to include well known elements for their intended purpose.

10. Claims 1 - 12 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 6, and 11 of U.S. Patent No. 7,251,515. Although the conflicting claims are not identical, they are not patentably distinct from each other because although the claims of the patent include operation and control buttons the claims of the patent do not include a button signal processing



filter mechanism for processing an input signal from the operation buttons. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of the patent to include a button signal processing filter mechanism, since it was well known in the art to include elements to process inputs from the buttons in an apparatus to allow a user to input data required by the apparatus, control measurement timing, etc., and it has generally been held to be within the skill level of the art to modify an apparatus to include well known elements for their intended purpose.

11. Claims 1 - 4 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 4 of U.S. Patent No. 7,254,426. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the patent include all of the features of the instant application except for operation buttons and control buttons and a button signal processing filter mechanism for processing an input signal from the operation buttons. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of the patent to include operation and control buttons and a signal processing filter mechanism, since it was well known in the art to include such buttons and elements to process inputs from the buttons in an apparatus to allow a user to input data required by the apparatus, control measurement timing, etc., and it has generally been held to be within the skill level of the art to modify an apparatus to include well known elements for their intended purpose.

12. Claims 1 - 4 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 3 of U.S. Patent No. 7,254,430. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the patent include all of the features of the instant application except for operation buttons and control buttons and a button signal processing filter mechanism for processing an input signal from the operation buttons. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of the patent to include operation and control buttons and a signal processing filter mechanism, since it was well known in the art to include such buttons and elements to process inputs from the buttons in an apparatus to allow a user to input data required by the apparatus, control measurement timing, etc., and it has generally been held to be within the skill level of the art to modify an apparatus to include well known elements for their intended purpose.

13. Claims 1 - 12 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, and 9 of U.S. Patent No. 7,251,514. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the patent include all of the features of the instant application except for operation buttons and control buttons and a button signal processing filter mechanism for processing an input signal from the operation buttons. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of the patent to include operation and control buttons and a signal processing filter mechanism, since it was well known in the

art to include such buttons and elements to process inputs from the buttons in an apparatus to allow a user to input data required by the apparatus, control measurement timing, etc., and it has generally been held to be within the skill level of the art to modify an apparatus to include well known elements for their intended purpose.

14. Claims 1 - 12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 6, and 11 of copending Application No. 11/059,607. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the copending application include all of the features of the instant application except for operation buttons and control buttons and a and a button signal processing filter mechanism for processing an input signal from the operation buttons. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of the copending application to include operation and control buttons and a signal processing filter mechanism, since it was well known in the art to include such buttons and elements to process inputs from the buttons in an apparatus to allow a user to input data required by the apparatus, control measurement timing, etc., and it has generally been held to be within the skill level of the art to modify an apparatus to include well known elements for their intended purpose.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

15. Claim 9 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 13 of copending Application No.

10/765,986. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the copending application include all of the features of the instant application except for operation buttons and control buttons and a and a button signal processing filter mechanism for processing an input signal from the operation buttons. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of the copending application to include operation and control buttons and a signal processing filter mechanism, since it was well known in the art to include such buttons and elements to process inputs from the buttons in an apparatus to allow a user to input data required by the apparatus, control measurement timing, etc., and it has generally been held to be within the skill level of the art to modify an apparatus to include well known elements for their intended purpose.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Conclusion***

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant cites several references related to measurement of analyte concentrations. Of particular relevance, Oosta et al. (USPN 5,725,480) teach use of temperature measurements, among other factors, to calibrate optical glucose measurements based upon a subject's skin type. Cho (WO 01/28414) suggests determining glucose concentrations based upon analysis of temperature and spectral measurements. However, the prior art does not teach or suggest a blood sugar level

measuring apparatus that includes a measuring arrangement that obtains a plurality of temperatures from a subject's body surface, a computing unit for converting measurement values provided from the temperature measurements and oxygen volume measurements into parameters which are used for computing a blood sugar level based on a stored relationship, and further including a plurality of operation buttons, in combination with the other claimed elements.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric F. Winakur whose telephone number is 571/272-4736. The examiner can normally be reached on M-Th, 7:30-5; alternate Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571/272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Eric F Winakur/

Art Unit: 3768

Primary Examiner, Art Unit 3768